## **REMARKS**

Claims 1-25 are pending in the application.

Claims 1, 10 and 18 have been amended herein. The amendments are supported at least by Figure 2 and paragraphs [0041]-[0042] of the Specification.

Reconsideration of the claims is respectfully requested.

## I. CLAIM REJECTIONS -- 35 U.S.C. § 103

Claims 1, 7-10, 16-18 and 24-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,719,344 to *Pawate* (hereinafter "Pawate"). Claims 2-6, 11-15 and 19-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pawate, in view of U.S. Patent No. 5,565,639 to *Bae* (hereinafter "Bae"). The Applicant respectfully traverses the rejections.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142, p. 2100-127 (8th ed. rev. 8 July 2010). Absent such a *prima facie* case, the applicant is under no obligation to produce evidence of nonobviousness. *Id*.

To establish a *prima facie* case of obviousness, three basic criteria must be met: First, there must be some reason – such as a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art – to modify the reference or to combine reference teachings. MPEP § 2142, pp. 2100-127 to 2100-128 (8th ed. rev. 8 July 2010); MPEP § 2143, pp. 2100-128 to 2100-139; MPEP § 2143.01, pp. 2100-139 to 2100-141. Second, there must be a reasonable expectation of success. MPEP § 2143.02, pp. 2100-141 to 2100-142 (8th ed. rev. 8 July 2010). Finally, the prior art reference (or references when combined) must teach or

suggest all of the claim limitations. MPEP § 2143.02, pp. 2100-141 to 2100-142 (8th ed. rev. 8 July

2010).

Amended independent Claim 1 recites:

1. An apparatus, comprising:

a cross correlator operable to receive a first audio signal and a second audio signal, the cross correlator also operable to cross correlate a first time period of the

first audio signal with a second time period of the second audio signal to produce a cross-correlated signal, where the second time period is larger than the first time

period;

at least one parameter identifier operable to receive the cross-correlated signal

and identify a plurality of parameters associated with at least one of the first and

second audio signals using the cross-correlated signal; and

a score generator operable to receive the plurality of parameters and generate an

indicator identifying an extent to which the first and second audio signals match.

That is, Claim 1 recites a cross correlator that cross correlates first and second audio signals by

comparing a first time period of the first audio signal with a second, larger time window of the

second audio signal. The Applicant respectfully submits that Pawate does not describe such a cross

correlator.

In rejecting Claim 1, the Office Action asserts that the similarity measure 33 of Pawate

describes a cross correlator operable to cross correlate first and second audio signals to produce a

cross-correlated signal, citing Figure 2 and column 2 lines 39-55. However, the audio signals of

Pawate are divided into frames and the similarity measure is determined for each frame. See Pawate,

col. 2, lines 55-63. Frame energy detectors 19 and 29 receive a continuous stream of data which are

analyzed in frames of 20 milliseconds duration and determine the frame energy for each frame. See

Pawate, col. 2, line 65, through col.3, line 4. Similarity measure 33 quantizes the outputs of frame

energy detectors 19 and 29 to one of two levels and performs an exclusive-OR on the quantized

values. See Pawate, Fig. 4; col. 3, lines 22-49.

- 14 -

**PATENT** 

Thus, Pawate teaches measuring the similarity of identically sized frames of first and second

audio signals. Pawate does not teach, suggest or even hint at a cross correlator that cross correlates

first and second audio signals by comparing a first time period of the first audio signal with a second,

larger time window of the second audio signal, as recited in Claim 1. Bae does nothing to overcome

the shortcomings of Pawate.

For at least these reasons, amended Claim 1 and its dependent Claims are patentable over the

cited references. Amended independent Claims 10 and 18 recite elements analogous to the novel and

non-obvious elements emphasized in traversing the rejection of Claim 1. Therefore, Claims 10 and

18 and their dependent claims also are patentable over the cited references.

Accordingly, the Applicant respectfully requests that the Examiner withdraw the § 103

rejections with respect to Claims 1-25.

- 15 -

DOCKET NO. 03-SIN-094 (STMI01-03094) SERIAL No. 10/700,872 **PATENT** 

**CONCLUSION** 

As a result of the foregoing, the Applicant asserts that the remaining Claims in the

Application are in condition for allowance, and respectfully requests an early allowance of such

Claims.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this

Application, the Applicant respectfully invites the Examiner to contact the undersigned at the

telephone number indicated below or at *dvenglarik@munckcarter.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this

communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK CARTER, LLP

Date: 6-27-2010

P.O. Box 802432

Dallas, Texas 75380

(972) 628-3600 (main number)

(972) 628-3616 (fax)

E-mail: dvenglarik@munckcarter.com

- 16 -